(Original Signature of Member)

115TH CONGRESS 1ST SESSION

H.R.

To amend title 18, United States Code, to provide a defense to prosecution for fraud and related activity in connection with computers for persons defending against unauthorized intrusions into their computers, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

Mr.	GRAVES of Georgia introduced	the	following	bill;	which	was	referred	t
	the Committee on							

A BILL

- To amend title 18, United States Code, to provide a defense to prosecution for fraud and related activity in connection with computers for persons defending against unauthorized intrusions into their computers, and for other purposes.
 - 1 Be it enacted by the Senate and House of Representa-
 - 2 tives of the United States of America in Congress assembled,
 - 3 SECTION 1. SHORT TITLE.
- 4 This Act may be cited as the "Active Cyber Defense
- 5 Certainty Act".

SEC. 2. CONGRESSIONAL FINDINGS.

2 Congress finds the following:

- (1) Cyber fraud and related cyber-enabled crimes pose a severe threat to the national security and economic vitality of the United States.
 - (2) As a result of the unique nature of cybercrime, it is very difficult for law enforcement to respond to and prosecute cybercrime in a timely manner, leading to the existing low level of deterrence and a rapidly growing threat. In 2015, the Department of Justice prosecuted only 153 cases of computer fraud. Congress determines that this status quo is unacceptable and that if left unchecked, the trend in cybercrime will only continue to deteriorate.
 - (3) Cybercriminals have developed new tactics for monetizing the proceeds of their criminal acts, making it likely that the criminal activity will be further incentivized in the absence of reforms to current law allowing for new cyber tools and deterrence methods for defenders.
 - (4) When a citizen or United States business is victimized as the result of such crime, the first recourse should be to report the crime to law enforcement and seek to improve defensive measures.

1 (5) Congress also acknowledges that many 2 cyberattacks could be prevented through improved 3 cyber defensive practices, including enhanced train-4 ing, strong passwords, and routine updating and 5 patching to computer systems.

- (6) Congress determines that the use of active cyber defense techniques, when properly applied, can also assist in improving defenses and deterring cybercrimes;
- (7) Congress also acknowledges that many private entities are increasingly concerned with stemming the growth of dark web based cyber-enabled crimes. The Department of Justice should attempt to clarify the proper protocol for entities who are engaged in active cyber defense in the dark web so that these defenders can return private property such as intellectual property and financial records gathered inadvertently.
- (8) Congress also recognizes that while Federal agencies will need to prioritize cyber incidents of national significance, there is the potential to assist the private sector by being more responsive to reports of crime through different reporting mechanisms. Many reported cybercrimes are not responded to in a time-

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1	ly manner creating significant uncertainty for many
2	businesses and individuals.
3	(9) Computer defenders should also exercise ex-
4	treme caution to avoid violating the law of any other
5	nation where an attacker's computer may reside.
6	(10) Congress holds that active cyber defense
7	techniques should only be used by qualified defend-
8	ers with a high degree of confidence in attribution,
9	and that extreme caution should be taken to avoid
10	impacting intermediary computers or resulting in an
11	escalatory cycle of cyber activity.
12	(11) It is the purposes of this act to provide
13	legal certainty by clarifying the type of tools and
14	techniques that defenders can use that exceed the
15	boundaries of their own computer network.
16	SEC. 3. EXCEPTION FOR THE USE OF ATTRIBUTIONAL
17	TECHNOLOGY.
18	Section 1030 of title 18, United States Code, is
19	amended by adding at the end the following:
20	"(k) Exception for the Use of Attributional
21	TECHNOLOGY.—
22	"(1) This section shall not apply with respect to
23	the use of attributional technology in regard to a de-
24	fender who uses a program, code, or command for
25	attributional purposes that beacons or returns loca-

1	tional or attributional data in response to a cyber in
2	trusion in order to identify the source of an intru-
3	sion; if—
4	"(A) the program, code, or command original
5	nated on the computer of the defender but is
6	copied or removed by an unauthorized user; and
7	"(B) the program, code or command does
8	not result in the destruction of data or result
9	in an impairment of the essential operating
10	functionality of the attacker's computer system
11	or intentionally create a backdoor enabling in-
12	trusive access into the attacker's computer sys-
13	tem.
14	"(2) Definition.—The term 'attributional
15	data' means any digital information such as log files
16	text strings, time stamps, malware samples, identi-
17	fiers such as user names and Internet Protocol ad-
18	dresses and metadata or other digital artifacts gath
19	ered through forensic analysis.".
20	SEC. 4. EXCLUSION FROM PROSECUTION FOR CERTAIN
21	COMPUTER CRIMES FOR THOSE TAKING AC
22	TIVE CYBER DEFENSE MEASURES.
23	Section 1030 of title 18, United States Code, is
24	amended by adding at the end the following:

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1	"(1) ACTIVE CYBER DEFENSE MEASURES NOT A
2	VIOLATION.—
3	"(1) Generally.—It is a defense to a criminal
4	prosecution under this section that the conduct con-
5	stituting the offense was an active cyber defense
6	measure.
7	"(2) INAPPLICABILITY TO CIVIL ACTION.—the
8	defense against prosecution created by this section
9	does not prevent a United States person or entity
10	who is targeted by an active defense measure from
11	seeking a civil remedy, including compensatory dam-
12	ages or injunctive relief pursuant to subsection (g).
13	"(3) Definitions.—In this subsection—
14	" (Λ) the term 'defender' means a person
15	or an entity that is a victim of a persistent un-
16	authorized intrusion of the individual entity's
17	computer;
18	"(B) the term 'active cyber defense meas-
19	ure'—
20	"(i) means any measure—
21	"(I) undertaken by, or at the di-
22	rection of, a defender; and
23	"(II) consisting of accessing
24	without authorization the computer of
25	the attacker to the defender's own

. 1	network to gather information in	
2	order to—	
3	"(aa) establish attribution of	
4	criminal activity to share with	
5	law enforcement and other	
6	United States Government agen-	
7	cies responsible for cybersecurity;	
8	"(bb) disrupt continued un-	
9	authorized activity against the	
10	defender's own network; or	
11	"(cc) monitor the behavior	
12	of an attacker to assist in devel-	
13	oping future intrusion prevention	
14	or cyber defense techniques; but	
15	"(ii) does not include conduct that—	
16	"(I) intentionally destroys or ren-	
17	ders inoperable information that does	
18	not belong to the victim that is stored	
19	on another person or entity's com-	
20	puter;	
21	"(II) recklessly causes physical	
22	injury or financial loss as described	
23	under subsection (c)(4);	
24	"(III) creates a threat to the	
25	public health or safety;	
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1	"(IV) intentionally exceeds the
2	level of activity required to perform
3	reconnaissance on an intermediary
4	computer to allow for attribution of
5	the origin of the persistent cyber in-
6	trusion;
7	"(V) intentionally results in in-
8	trusive or remote access into an
9	intermediary's computer;
10	"(VI) intentionally results in the
11	persistent disruption to a person or
. 12	entities internet connectivity resulting
13	in damages defined under subsection
14	(e)(4); or
15	"(VI) impacts any computer de-
16	scribed under subsection (a)(1) re-
17	garding access to national security in-
18	formation, subsection (a)(3) regarding
19	government computers, or to sub-
20	section (c)(4)(A)(i)(V) regarding a
21	computer system used by or for a
22	Government entity for the furtherance
23	of the administration of justice, na-
24	tional defense, or national security;

1	"(C) the term 'attacker' means a person of
2	an entity that is the source of the persistent un
3	authorized intrusion into the victim's computer
4	and
5	"(D) the term 'intermediary computer
6	means a person or entity's computer that is not
7	under the ownership or primary control of the
8	attacker but has been used to launch or obscure
9	the origin of the persistent cyber-attack.".
10	SEC. 5. NOTIFICATION REQUIREMENT FOR THE USE OF AC
11	TIVE CYBER DEFENSE MEASURES.
12	Section 1030 of title 18, Unites State Code, is
13	amended by adding the following:
14	"(m) Notification Requirement for the Use
15	OF ACTIVE CYBER DEFENSE MEASURES.—
16	"(1) GENERALLY.—A defender who uses an ac-
17	tive cyber defense measure under the preceding sec-
18	tion must notify the FBI National Cyber Investiga
19	tive Joint Task Force and receive a response from
20	the FBI acknowledging receipt of the notification
21	prior to using the measure.
22	"(2) REQUIRED INFORMATION.—Notification
23	must include the type of cyber breach that the per-
24	son or entity was a victim of, the intended target of
25	the active cyber defense measure, the steps the de-

- 1 fender plans to take to preserve evidence of the
- 2 attacker's criminal cyber intrusion, as well as the
- 3 steps they plan to prevent damage to intermediary
- 4 computers not under the ownership of the attacker
- 5 and other information requested by the FBI to as-
- 6 sist with oversight.".

7 SEC. 6. VOLUNTARY PREREEMPTIVE REVIEW OF ACTIVE

- 8 CYBER DEFENSE MEASURES.
- 9 (a) PILOT PROGRAM.—The Federal Bureau of Inves-
- 10 tigation (hereinafter in this section referred to as the
- 11 "FBI"), in coordination with other Federal agencies, shall
- 12 create a pilot program to last for 2 years after the date
- 13 of enactment of this Act, to allow for a voluntary preemp-
- 14 tive review of active defense measures.
- 15 (b) Advance Review.—A defender who intends to
- 16 prepare an active defense measure under section 4 may
- 17 submit their notification to the FBI National Cyber Inves-
- 18 tigative Joint Task Force in advance of its use so that
- 19 the FBI and other agencies can review the notification and
- 20 provide its assessment on how the proposed active defense
- 21 measure may be amended to better conform to Federal
- 22 law, the terms of section 4, and improve the technical op-
- 23 eration of the measure.

1	(c) Prioritization of Requests.—The FBI may
2	decide how to prioritize the issuance of such guidance to
3	defenders based on the availability of resources.
4	SEC. 7. ANNUAL REPORT ON THE FEDERAL GOVERNMENT'S
5	PROGRESS IN DETERRING CYBER FRAUD
6	AND CYBER-ENABLED CRIMES.
7	The Department of Justice, after consultation with
8	the Department of Homeland Security and other relevant
9	Federal agencies, shall deliver an annual report to Con-
0	gress not later than March 31 of each year, detailing the
1	results of law enforcement activities pertaining to
12	cybercriminal deterrence for the previous calendar year.
13	The report shall include—
[4	(1) the number of computer fraud cases
5	reported by United States citizens and United
6	States businesses to FBI Field Offices, the Secret
7	Service Electronic Crimes Task Force, The Internet
18	Crimes Complaint Center (IC3) website, and other
9	Federal law enforcement agencies;
20	(2) the number of investigations opened as a re-
21	sult of public reporting of computer fraud crimes,
22.	and the number of investigations open independently
23	of any specific crimes being reported;
24	(3) the number of cyber fraud cases prosecuted
25	under section 1030 of title 18. United States Code.

1	and other related statutes involving cybercrime, in-
2	cluding the resolution of the cases;
3	(4) the number of computer fraud crimes deter-
4	mined to have originated from United States sus-
5	pects and the number determined to have originated
6	from foreign suspects, and details of the country of
7	origin of the suspected foreign suspects;
8	(5) the number of dark web cybercriminal mar-
9	ketplaces and cybercriminal networks disabled by
10	law enforcement activities;
11	(6) an estimate of the total financial damages
12	suffered by United States citizens and businesses re-
13	sulting from ransomware and other fraudulent
14	cyber-attacks;
15	(7) the number of law enforcement personnel
16	assigned to investigate and prosecute cybercrimes;
17	and
18	(8) the number of active cyber defense notifica-
19	tions filed as required by this Act and a comprehen-
20	sive evaluation of the notification process and vol-
21	untary preemptive review pilot program.

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1	SEC. 8. REQUIREMENT FOR THE DEPARTMENT OF JUSTICE
2	TO UPDATE THE MANUAL ON THE PROSECU-
3	TION OF CYBER CRIMES.
4	(a) The Department of Justice shall update the
5	"Prosecuting Computer Crimes Manual," to reflect the
6	changes made by this legislation.
7	(b) The Department of Justice is encouraged to seek
8	additional opportunities to clarify the manual and other
9	guidance to the public to reflect evolving defensive tech-
0	niques and cyber technology that can be used in manner
1	that does not violate section 1030 of title 18, United
2	States Code, or other Federal law and international trea-
3	ties.
4	SEC. 9. SUNSET.
5	The exclusion from prosecution created by this Act

- 16 shall expire 2 years after the date of enactment of this
- 17 Act.

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